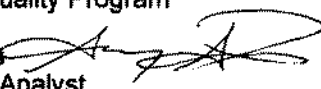



January 3, 2001

MEMORANDUM

TO: Orville D. Green
Administrator
State Air Quality Program

FROM: Gary Gates 
Air Quality Analyst
State Technical Services Office

THROUGH: Daniel Salgado 
Lead, Process Engineering
State Technical Services Office

SUBJECT: P-9506-083-1, Northwest Pipeline Corporation; Soda Springs, Idaho
(Technical Analysis for Proposed Tier I Operating Permit #007-00008)

PERMITTEE:	Northwest Pipeline Corporation 295 Chipeta Way Salt Lake City, Utah 84108
PERMIT NO:	007-00008
STANDARD INDUSTRIAL CLASSIFICATION	4922
DESCRIPTION:	Natural Gas Compressor Station
KIND OF PRODUCTS:	Natural Gas Transmission
RESPONSIBLE OFFICIAL:	Michael Falk; Director, Operations
PERSON TO CONTACT:	Kirt Rhoads; Senior Environmental Specialist
TELEPHONE NO:	(801) 584-6763
# OF FULL-TIME EMPLOYEES:	0
AREA OF OPERATION:	40 acres
FACILITY CLASSIFICATION:	A
COUNTY:	Bear Lake
AIR QUALITY CONTROL REGION:	061
UTM COORDINATES:	465.5, 4709.9
EXACT PLANT LOCATION:	Section 22, T-10-S, R-43-E

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1. PURPOSE

The purpose of this memorandum is to set out the legal and factual basis for this Tier I Operating Permit (OP) in accordance with IDAPA 58.01.01.362 (*Rules for the Control of Air Pollution in Idaho*) (*Rules*).

Idaho Department of Environmental Quality (DEQ) staff have reviewed the information provided by Northwest Pipeline Corporation (NWP) regarding the operation of their facility in Soda Springs, Idaho. This information was submitted based on the requirements of the Tier I OP in accordance with IDAPA 58.01.01.300 of the *Rules*.

Based on the information submitted, DEQ has drafted a Tier I OP for NWP. The permit has been submitted for a public comment. In addition, the OP was sent to Wyoming for Affected State Review. The permit was also forwarded to the United States Environmental Protection Agency (EPA) for their review in accordance with IDAPA 58.01.01.366.

2. SUMMARY OF EVENTS

On June 22, 1995, DEQ received the Tier I OP application from NWP for their Soda Springs Compressor Station. The application was prepared by Foster Wheeler Environmental Corporation, the facility's consulting firm. The application was determined to be administratively complete on August 21, 1995. The permit was submitted for public comment between September 22, 1999 and October 22, 1999. The permit was submitted to EPA for their 45 day review from October 11, 2000 to November 24, 2000. EPA had no objections with regard to the terms and conditions of the permit.

3. BASIS OF THE ANALYSIS

The following documents were relied upon in preparing this memorandum and the Tier I OP:

- a. Tier I Air Operating Permit Application, (June 22, 1995, Northwest Pipeline Corporation; Salt Lake City, Utah; prepared by Foster Wheeler Environmental Corporation);
- b. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, January 1995, Office of Air Quality Planning and Standards, United States Environmental Protection Agency;
- c. 40 CFR Part 70;
- d. Guidance developed by EPA and DEQ;
- e. Title V permits issued by other jurisdictions; and
- f. Documents and procedures developed in the Title V Pilot Operating Permit program.

4. REGULATORY ANALYSIS - GENERAL FACILITY

4.1 Facility Description

4.1.1 General Process Description

The Soda Springs Compressor Station operates remotely from NWP's headquarters, located in Salt Lake City, and is used to transmit natural gas along NWP's natural gas transmission pipeline. The station is operated to meet the demand of the pipeline system rather than a fixed schedule. The arrangement of pipes and valves in the Soda Springs pipe yard allows natural gas to be transmitted in either direction.

Natural gas entering the station passes through a cyclone separator that removes impurities from the gas stream. The natural gas is compressed through the compressor and is returned to the transmission pipeline. Fuel for the reciprocating engines and other natural gas combustion equipment enters the station in separate piping that originates in the pipe yard downstream of the filter. Fuel gas is regulated downstream from mainline pressures to pressures appropriate for the reciprocating engines in the fuel meter building. From the fuel meter building, natural gas is piped to the reciprocating engines, the hot water heater, space heaters, and the backup generator. The

reciprocating engines, hot water heater, backup generator, and space heaters have their own exhaust stacks.

Lubricating oil is stored in a storage tank from which it flows by gravity on demand to a storage tank in the compressor building. When the engine is running, lubricating oil circulates through the engine. The hydraulic oil is pumped to a fan-assisted cooler located outside the compressor building. Oil that may leak from the hydraulic oil system pump is captured and conveyed to a sump. From the sump the used oil is pumped to the used-oil tank where it is sent for recycling. If Northwest Pipeline experiences a hydraulic oil leak outside the building, manual cleanup is required.

There is no glycol dehydration unit at this facility. The facility is not subject to the Natural Gas Transmission MACT in 40 CFR Part 63 Subpart HH.

The emissions from the Soda Springs Compressor Station are largely the result of natural gas combustion. In addition, there are small amounts of emissions from various other sources. Appendix A provides detailed emission estimates from the facility. The principal pollutants of concern are NO_x and VOC.

The hazardous air pollutants (HAPs) emanating from the facility are mostly from the reciprocating engines in the form of organic and inorganic compounds. The emissions are listed in Appendix A. As the facility emits more than ten (10) tons per year of formaldehyde, it is a major source of HAPs.

4.1.2 Facility Classification

The facility is a natural gas compressor station, SIC 4922.

4.1.3 Area Classification

The facility is located 13 miles south of Soda Springs, Idaho, which is classified as attainment or unclassifiable for all federal and state criteria pollutants (i.e., SO₂, NO_x, CO, PM₁₀, ozone, fluorides, and lead). There are no Class I areas within ten (10) kilometers (km) of the facility.

4.1.4 Permitting History

Northwest Pipeline Corporation has not been issued a Permit to Construct or an Operating Permit for the Soda Springs Compressor Station.

4.2 Facility-wide Applicable Requirements

4.2.1 Fugitive Particulate Matter - IDAPA 58.01.01.650-651

4.2.1(a) Requirement

Facility-wide Condition A.1 states that, all reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651.

4.2.1(b) Compliance Demonstration

Facility-wide Condition A.2 states that the permittee is required to monitor and record the frequency and the methods used by the facility to reasonably control fugitive particulate emissions. IDAPA 58.01.01.651 gives some examples of ways to reasonably control fugitive emissions which include, use of water or chemicals, application of dust suppressants, use of control equipment, covering of trucks, paving of roads or parking areas, and removal of materials from streets.

Facility-wide Condition A.3 requires that the permittee maintain records of all fugitive dust complaints received. In addition the permittee is required to take appropriate corrective action as expeditiously as practicable after a valid complaint is received. The permittee is also required to maintain records which shall include the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken and the date the corrective action was taken.

To ensure that the methods being used by the permittee to reasonably control fugitive particulate matter emissions whether or not a complaint is received, facility-wide condition A.4 requires that the permittee conduct quarterly inspections of the facility. The facility has minimal vehicle traffic and only one road into the facility; therefore, quarterly inspections will be sufficient. The permittee is required to inspect potential sources of fugitive emissions during daylight hours and under normal operating conditions. If the permittee determines that the fugitive emissions are not being reasonably controlled the permittee shall take corrective action as expeditiously as practicable. The permittee is also required to maintain records of the results of each fugitive emission inspection.

Both Facility-wide Conditions A.3 and A.4 require the permittee to take corrective action as expeditiously as practicable. In general, the Department believes that taking corrective action within twenty-four hours of receiving a valid complaint or determining that fugitive particulate emissions are not being reasonably controlled meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

4.2.2 Control of Odors - IDAPA 58.01.01.775-776

4.2.2.(a) Requirement

Facility-wide Condition A.5 and IDAPA 58.01.01.776 both state that: *"No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids to the atmosphere in such quantities as to cause air pollution."* This condition is currently considered federally enforceable until such time it is removed from the SIP, at which time it will be a state-only enforceable requirement.

4.2.2.(b) Compliance Demonstration

Facility-wide Condition A.6 requires the permittee to maintain records of all odor complaints received. If the complaint has merit, the permittee is required to take appropriate corrective action as expeditiously as practicable. The log is required to contain the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Facility-wide Condition A.6 requires the permittee to take corrective action as expeditiously as practicable. In general, the Department believes that taking corrective action within twenty-four hours of receiving a valid odor complaint meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

4.2.3 Visible Emissions - IDAPA 58.01.01.625

4.2.3.(a) Requirement

IDAPA 58.01.01.625 and Facility-wide Condition A.7 state that *"(No) person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined . . ."* by IDAPA 58.01.01.625. This provision does not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas are the only reason(s) for the failure of the emission to comply with the requirements of this rule.

4.2.3.(b) Compliance Demonstration

To ensure reasonable compliance with the visible emission rule, Facility-wide Condition A.8 requires that the permittee conduct quarterly visible emissions inspections of the facility. The facility uses exclusively natural gas with no visible emissions expected; therefore, quarterly monitoring is sufficient. The permittee is required to inspect potential sources of visible emissions, during daylight hours and under normal operating conditions. If any visible emissions are present from any point of emission covered by this section, the permittee must take appropriate corrective action as expeditiously as practicable. If opacity is determined

to be greater than twenty percent (20%) for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, the permittee must take corrective action and report the exceedance in its annual compliance certification and in accordance with the excess emissions rules in IDAPA 58.01.01.130-136. The permittee is also required to maintain records of the results of each visible emissions inspection which must include the date of each inspection and a description of the permittee's assessment of the conditions existing at the time visible emissions are present, any corrective action taken in response to the visible emissions, and the date corrective action was taken.

It should be noted that if a specific emission unit has a specific compliance demonstration method for visible emissions that differs from Facility-wide Condition A.8, then the specific compliance demonstration method overrides the requirement of Condition A.8. Condition A.8 is intended for small sources that would generally not have any visible emissions.

Facility-wide Condition A.8 requires the permittee to take corrective action as expeditiously as practicable. In general, the Department believes that taking corrective action within twenty-four hours of discovering visible emissions meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

4.2.4 Startup, Shutdown, Scheduled Maintenance, Safety Measures, Upset and Breakdown- IDAPA 58.01.01.130-136

4.2.4.(a) Requirement

Facility-wide Condition A.9 requires that the permittee comply with the requirements of IDAPA 58.01.01.130-136 for startup, shutdown, scheduled maintenance, safety measures, upset and breakdowns. This section is fairly self explanatory and no additional detail is necessary in this technical analysis. It should, however, be noted that IDAPA 58.01.01.133.02, 133.03, 134.04, and 134.05 are not specifically included in the permit as applicable requirements. These provisions of the *Rules* only apply if the Permittee anticipates requesting consideration under subsection 131.02 of the *Rules* to allow the Department to determine if an enforcement action to impose penalties is warranted. IDAPA 58.01.01.131.01 states "... The owner or operator of a facility or emissions unit generating excess emissions shall comply with IDAPA 58.01.01.131, 132, 133.01, 134.01, 134.02, 134.03, 135, and 136, as applicable. If the owner or operator anticipates requesting consideration under IDAPA 58.01.01.131.02, then the owner or operator shall also comply with the applicable provisions of IDAPA 58.01.01.133.02, 133.03, 134.04, and 134.05." Failure to prepare or file procedures pursuant to IDAPA 58.01.01.133.02 and 134.04 is not a violation of the *Rules* in and of itself, as stated in IDAPA 58.01.01.133.03.a and 134.06.b. Therefore, since the Permittee has the option to follow the procedures in IDAPA 58.01.01.133.02, 133.03, 134.04, and 134.05; and is not compelled to, the subsections are not considered applicable requirements for the purpose of this permit and are not included as such.

4.2.4.(b) Compliance Demonstration

The compliance demonstration is contained within the text of Facility-wide Condition A.9. No further clarification is necessary here.

4.2.5 Reporting

4.2.5.(a) Requirement

The permittee is required to submit periodic reports and certifications to the Department at the required times to the appropriate agency as described in Facility-wide Condition A.10.

Sufficient reporting to assure compliance with all of the terms and conditions of the permit. Reports for any required monitoring shall be submitted at least every six (6) months in accordance with IDAPA 58.01.01.322.08.

In accordance with IDAPA 58.01.01.322.08, NWP must report all instances of deviations from permit requirements. Therefore, even if specific monitoring is not required by the permit, the Permittee must report any deviations of which he/she is aware.

4.2.5.(b) Compliance Demonstration

The compliance demonstration is contained within the text of Facility-wide Condition A.10. No further clarification is necessary here.

4.2.6 Recordkeeping

4.2.6.(a) Requirement

The Permittee is required to maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of the permit as required by IDAPA 58.01.01.322.a and b. In addition, the Permittee shall retain records of all monitoring and other requirements in the Tier I OP for the most recent five (5) year period. These records shall be made available to DEQ representatives upon request.

4.2.6.(b) Compliance Demonstration

The compliance demonstration is contained within the text of Facility-wide Conditions. No further clarification is necessary here.

4.2.7 Chemical Accident Prevention Provisions - 40 CFR Part 68

4.2.7.(a) Requirement

Any facility that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115 must comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR Part 68 no later than the latest of the following dates:

Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130; or

The date on which a regulated substance is first present above a threshold quantity in a process.

This facility is not currently subject to the requirements of 40 CFR Part 68. However, should the facility ever become subject to the requirements of 40 CFR Part 68 then it must comply with the provisions contained in 40 CFR Part 68 by the time listed above.

4.2.7.(b) Compliance Demonstration

The compliance demonstration is contained within the text of the Facility-wide Conditions. No further clarification is necessary here.

4.2.8 Testing

4.2.8.(a) Requirement

Testing is required in the permit, and all testing must meet the requirements as set forth in Facility-wide Condition A.15. The required testing then must also meet the notification requirements as stated in Facility-wide Condition A.16. NWP has requested that 45 days be allowed for submitting test reports. IDAPA 58.01.01.157 does allow for a permit to specify a time allowed for report submission. NWP contracts one testing company to do all of their testing at one time. Extra time is then needed after performing all testing to draft and submit all of the test reports.

4.2.8.(b) Compliance Demonstration

The compliance demonstration is contained within the text of the Facility-wide Conditions. No further clarification is necessary here.

4.3 Alternative Operating Scenarios

There were no alternative operating scenarios requested by the facility.

4.4 Trading Scenarios

There were no trading scenarios requested by the facility.

4.5 Excess Emissions

NWP did not submit procedures to minimize excess emissions for possible excuses from violation.

5. REGULATORY ANALYSIS - EMISSIONS UNITS

5.1 Clark Reciprocating Engines

5.1.1 Emission Unit Description

The natural gas compressors are powered by Dresser-Rand Clark reciprocating engines. The engines are sources of PM₁₀, SO₂, CO, NO_x, VOCs, and some HAPs. The units 1 through 3 compressors are each powered by Model TLA-6 engines, each of which are rated at a maximum 1,700 hp at station conditions. Units 1 through 3 were installed when the station was constructed in 1956. Unit 4 consists of a Clark TCVA-16 reciprocating engine and compressor. This engine, installed in 1969 when the station was upgraded, is rated at a maximum of 6,960 hp at station conditions.

The stack parameters for units 1 through 3 of the Clark reciprocating engines are as follows:

Stack Height:	25.3 feet
Stack Diameter:	1.5 feet
Stack Flow Rate:	19,238 ACFM
Stack Temperature:	745°F (average)

The stack parameters for unit 4 Clark reciprocating engine are as follows:

Stack Height:	44.0 feet
Stack Diameter:	2.0 feet
Stack Flow Rate:	51,500 ACFM
Stack Temperature:	711°F (average)

5.1.2 Permit Requirement - VISIBLE EMISSIONS - [IDAPA 58.01.01.625]

5.1.2.(a) Applicability

All four Clark Reciprocating Engines are affected by IDAPA 58.01.01.625 and .675.

5.1.2.(b) Compliance Demonstration Method

Compliance with these standards shall be demonstrated by burning only natural gas in the reciprocating engines. Since combustion of natural gas results in very little particulate matter emissions, DEQ staff do not foresee that normal operations of natural gas combustion will cause a violation of the twenty percent (20%) opacity standard or the grain-loading standard. Section 8.4 of the permit application affirms that the plume opacity from the reciprocating engines is less than two percent while burning natural gas.

5.1.2.(c) Monitoring

As long as natural gas is being burned in the reciprocating engines, no monitoring besides fuel usage is required.

5.1.2.(d) Testing

No testing is required to demonstrate compliance with these requirements.

5.1.2.(e) Recordkeeping

Any records shall be maintained by the Permittee for a period of five (5) years. These records shall be made available to DEQ representatives upon request.

5.1.2.(f) Reporting

Pursuant to IDAPA 58.01.01.322.08.b, the Permittee is required to submit a report every six (6) months that includes all instances of deviations from the requirements of this permit. The Permittee shall submit the initial report six (6) months after issuance of the permit and submit subsequent reports every six (6) months thereafter.

5.1.3 Permit Requirement - FUEL BURNING EQUIPMENT - [IDAPA 58.01.01.675]

5.1.3.(a) Applicability

All four Clark Reciprocating Engines are affected by IDAPA 58.01.01.675.

5.1.3.(b) Compliance Demonstration Method

Compliance with this standard shall be demonstrated by using the same methods as those stated in 5.1.2.(b) of this memorandum. In addition, at least once during the permit term, the permittee shall conduct a performance test on one of the reciprocating engines to demonstrate compliance with the grain-loading standard.

5.1.3.(c) Monitoring

As long as natural gas is being burned in the reciprocating engines, no monitoring besides fuel usage is required.

5.1.3.(d) Testing

At least once during the permit term, one of the Clark reciprocating engines must be tested to show compliance with the grain-loading limit in Condition B.1 of the permit.

Emission testing methods shall be in accordance with the test methods and procedures in IDAPA 58.01.01.157, and Condition A.15 of this permit.

5.1.3.(e) Recordkeeping

Recordkeeping shall be performed as stated in 5.1.2.(e) of this memorandum.

5.1.3.(f) Reporting

Pursuant to IDAPA 58.01.01.322.08.b, the Permittee is required to submit a report every six (6) months that includes all instances of deviations from the requirements of this permit. The Permittee shall submit the initial report six (6) months after issuance of the permit and submit subsequent reports every six (6) months thereafter.

6. INSIGNIFICANT ACTIVITIES

There are several sources listed as insignificant at the Soda Springs Compressor Station (see application at Section 2.9). These emission units qualify as insignificant due to the quantity of emissions or to the fact the source itself is specifically listed in IDAPA 58.01.01.317.01.a and/or b. Emission units that are listed as insignificant under IDAPA 317.01.b are listed in the Tier I OP in order to be covered by the permit shield. The emission units that were determined insignificant under IDAPA 317.01.a are not listed in the Tier I OP. While there are no monitoring requirements for insignificant emissions units at this facility, these units must comply with all applicable federal, state, and local requirements.

6.1 Hot Water Heater

The 3.3-MMBtu/hour hot water heater is located in the auxiliary building and exhausts to its own stack which penetrates the roof of the auxiliary building. Operating entirely on natural gas, the hot water heater is the source of small quantities of PM₁₀, SO₂, CO, NO_x, VOCs, and some HAPs. Emissions from the hot water heater are considered insignificant in accordance with IDAPA 58.01.01.317.b.i.5.

6.2 Backup Generator

In the event that electric power to the facility is interrupted, electricity would be generated by a natural gas powered backup generator. About once a week, the generator is automatically tested for about one hour.

The backup generator is driven by a 600-hp engine manufactured by Caterpillar (Model 3412G). The engine exhausts to its own stack, which is a 6-inch pipe that penetrates the roof of the auxiliary building. The backup generator is the source of small quantities of PM₁₀, SO₂, CO, NO_x, VOCs, and some HAPs. Emissions from the backup generator are considered insignificant in accordance with IDAPA 58.01.01.317.b.i.5.

6.3 Space Heaters

Natural gas fueled heaters are located in the valve skids, the shop, the warehouse, the auxiliary building, shop, and office buildings. There are two space heaters individually rated at 45,000 Btu/hour in each of the two valve skids. The warehouse and the shop each have one heater which are rated at 70,000 Btu/hour and 195,000 Btu/hour, respectively. Northwest also has a Silvals fuel-gas heater rated at 500,000 Btu/hour. The heater exhausts to its own stack which penetrates the roof. Emissions from the space heaters are considered insignificant in accordance with IDAPA 58.01.01.317.b.i.5.

6.4 Lubricating Oil System

The lubricating oil system for the reciprocating engine compressors consists of a 277-bbl storage tank, the circulation system, a used-oil collection system, and a used-oil tank. All tanks are vented to the atmosphere.

The lubricating oil system is a source of a small amount of VOC emissions. Emissions from the lubricating system are considered insignificant in accordance with IDAPA 58.01.01.317.a.i.4.

6.5 Natural Gas Pipeline and Fuel System

Natural gas contains some non-methane hydrocarbons. Both methane (methane and ethane) and VOCs would be emitted to the atmosphere from leaking valves, flanges, and pressure relief valves. The flanges, valves, and pressure relief valves that comprise the natural gas conveyance system in the pipe yard, as well as the fuel gas system, are sources of methane/ethane and VOC fugitive emissions.

Annually, the Emergency Shutdown (ESD) system at the Soda Springs station is tested. The ESD system is designed to shut down the station and vent all of the natural gas in the pipes in the event of an emergency. Maintenance performed on pipes that transmit natural gas require that material in the pipes first be vented. The vented natural gas, or blowdown, is another source of methane and VOC emissions.

The piping used to convey natural gas to and from the compressors includes valves, flanges, compressor seals, and pressure relief valves. A separate system brings fuel gas to the reciprocating engines and other natural gas combustion equipment. Emissions are based on EPA emission factors for compressor seals, in-line valves, pressure relief valves, and flanges, and the number of each of these items in the system. Emissions from the natural gas pipeline and fuel system are considered insignificant in accordance with IDAPA 58.01.01.317.b.i.30.

6.6 Fugitive Sources

The emission factors from EPA's AP-42, Fifth Edition (1995), Section 13.2.2 were used to determine the PM₁₀ emissions from vehicles operated on gravel roads at the site. Emissions from fugitive sources are considered insignificant in accordance with IDAPA 58.01.01.317.b.i.30.

7. COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION

7.1 Compliance Plan

NWP has submitted a compliance plan indicating that all emission units are in compliance, and will continue to comply, with the terms and conditions of IDAPA 58.01.01.314.11. In addition, if there are additional terms or conditions applicable to the source, NWP will meet the terms and conditions on a timely basis as required by DEQ.

7.2 Compliance Certification

NWP shall submit a periodic compliance certification for each emissions unit in the form of annual report to DEQ and EPA within thirty (30) days after the end of each calendar year. The basic compliance requirements of each emissions unit are fuel usage, visible emission standard, and fugitive emissions in accordance with IDAPA 58.01.01.314.10.

7.3 Compliance Inspection

The facility may be inspected at least annually by DEQ. Copies of the annual inspection reports are located in the source file at the DEQ office in Boise, Idaho.

8. AIRS DATABASE

There are no new emission sources associated with this permit. All units have been registered into the AIRS database.

9. REGISTRATION FEES

IDAPA 58.01.01.525 applies to this facility. Northwest Pipeline Corporation shall determine annual emissions in a manner consistent with IDAPA 58.01.01.525 for the purposes of registration fees.

10. RECOMMENDATIONS

Based on the Tier I OP application and review of the federal regulations and state rules, staff recommends that DEQ issue a Tier I OP for Northwest Pipeline Corporation's Soda Springs Compressor Station located in Soda Springs, Idaho.

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Attachments

cc: Pocatello Regional Office
DEQ State Office
EPA, Region X, L. Kral

APPENDIX A

NORTHWEST PIPELINE CORPORATION
SODA SPRINGS COMPRESSOR STATION
POINT SOURCE HOURLY (lb/hr) AND ANNUAL (T/yr) EMISSION ESTIMATES*

Source	PM-10		CO		NO _x		SO ₂		VOC	
	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)
Reciprocating Engine, Unit 1	0.20	0.89	8.58	37.6	67.6	296	0.12	0.51	1.79	7.82
Reciprocating Engine, Unit 2	0.20	0.89	8.58	37.6	67.6	296	0.12	0.51	1.79	7.82
Reciprocating Engine, Unit 3	0.20	0.89	8.58	37.6	67.6	296	0.12	0.51	1.79	7.82
Reciprocating Engine, Unit 4	0.76	3.31	77.2	338	193	847	0.43	1.89	12.3	54.0
TOTAL	1.36	5.98	103	451	396	1735	0.79	3.42	17.7	77.5

a As determined by DEQ's emission estimation methods.

NORTHWEST PIPELINE CORPORATION
HAZARDOUS AIR POLLUTANTS SOURCE
ANNUAL (T/yr) EMISSION ESTIMATES^a

Hazardous Air Pollutant	Reciprocating Engine, Unit 1	Reciprocating Engine, Unit 2	Reciprocating Engine, Unit 3	Reciprocating Engine, Unit 4	Total
	(T/yr)	(T/yr)	(T/yr)	(T/yr)	(T/yr)
Benzene	0.119	0.119	0.119	0.440	0.797
Formaldehyde	4.13	4.13	4.13	14.6	27.0
Toluene	0.119	0.119	0.119	0.440	0.797
Xylenes	0.178	0.178	0.178	0.660	1.20
Ethylbenzene	0.0595	0.0595	0.0595	0.220	0.399
Acetaldehyde	8.53E-04	8.53E-04	8.53E-04	3.16E-03	5.72E-03

a As determined by DEQ's emission estimation methods.